ABSTRACT OF THE DISCLOSURE

A method is provided for isolating faults in an optical network having a plurality of partial regenerators. The method includes: transmitting an optical signal through the optical network; determining an error rate for the optical signal at an egress point of the optical network; sequentially introducing a dither control signal into the optical signal at each of the plurality of partial regenerators; and monitoring the error rate for the optical signal at the egress point of the optical network; thereby isolating where a fault occurs in the optical network.